



Air Force Research Laboratory|AFRL

Science and Technology for Tomorrow's Air and Space Force

Success Story

TECHNOLOGY LEADS TO FIRST SNELL-APPROVED DISPLAY SYSTEM FOR COMMERCIAL SAFETY HELMETS



Snell is known for its work in setting, maintaining, and upgrading the most authoritative helmet standards in the US and throughout the world. Anthropometry data and models, developed by the Human Effectiveness Directorate's Crew System Interface Division, have enhanced the capability of a protective helmet in the racing arena.



Air Force Research Laboratory
Wright-Patterson AFB OH

Accomplishment

The directorate's anthropometry expertise, data, and models resulted in the first Snell safety-approved integration of a display system for a BMW Formula 1 racing helmet prototype. BMW Group Technology in Palo Alto, California, and BMW Group DesignworksUSA located in Newbury Park, California, developed the system.

Background

Protective helmets are one of the most effective means of preventing injury, permanent disability, or death in recreational and professional activities that incorporate speed and agility, like auto racing, motorcycling, and skiing. The BMW Group consulted the directorate to find a solution for placing the display within the system as well as to assist in helmet sizing.

Anthropometry expertise in the directorate's Human Technology Interface Branch became an integral part of the project. BMW Group DesignworksUSA reported that three-dimensional anthropometry data from the directorate helped bring about Snell's safety approval.

Human Effectiveness
Technology Transfer

Additional information

To receive more information about this or other activities in the Air Force Research Laboratory, contact TECH CONNECT, AFRL/XPTC, (800) 203-6451 and you will be directed to the appropriate laboratory expert. (04-HE-03)